## (19) World Intellectual Property **Organization**

International Bureau





(43) International Publication Date 15 September 2005 (15.09.2005)

PCT

## (10) International Publication Number WO 2005/084466 A1

- (51) International Patent Classification<sup>7</sup>: A24D 3/16, 3/02
- (21) International Application Number:

PCT/GB2005/000878

- (22) International Filing Date: 8 March 2005 (08.03.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 04251322.6

8 March 2004 (08.03.2004) EP

- (71) Applicant (for all designated States except US): AC-ETATE PRODUCTS LTD [GB/GB]; 1 Holme Lane, Spondon, Derby DE21 7BP (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): DAY, Craig [GB/GB]; Acetate Products Ltd, 1 Holme Lane, Spondon, Derby DE21 7BP (GB). TRAVERS, John [GB/GB]; Acetate Products Ltd, 1 Holme Lane, Spondon, Derby DE21 7BP (GB).
- (74) Agent: JOHNSTONE, Helen; Eric Potter Clarkson, Park View House, 58 The Ropewalk, Nottingham NG1 5DD (GB).

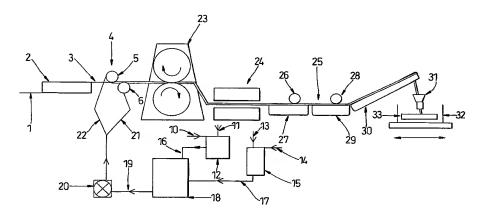
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PROCESS FOR MAKING FILTER TOW



(57) Abstract: A process for making a crimped tow of filaments suitable for forming a bale of crimped tow for conversion to cigarette filter rods comprising, presenting an uncrimped tow of filaments in a banded condition, adhesively bonding to the filaments of the banded tow (3), porous particles having absorbent surfaces imparting filtration capacity for tobacco smoke constituents, and crimping the banded tow, wherein the process comprises the steps, of: (i) pre-treating the particles to load them with a material capable of generating a gaseous emission from the particles thus forming pre-treated particles; (ii) applying to the filaments of the banded tow, the pre-treated particles and an adhesive for bonding the particles to the filaments; and subsequently (iii) treating the tow to generate the gaseous emission from the pre-treated particles so as to limit deactivation of the absorbent particle surfaces by the adhesive.

